

**RAW SEQUENCE LISTING
PATENT APPLICATION US/09/756,551A**

DATE: 10/26/2001
TIME: 08:35:18

INPUT SET: S36649.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

**RAW SEQUENCE LISTING
PATENT APPLICATION US/09/756,551A**DATE: 10/26/2001
TIME: 08:35:18**INPUT SET: S36649.raw**

47 (A) APPLICATION NUMBER: 08/087,009
48 (B) FILING DATE: 01-JUL-1993
49
50 (xi) ATTORNEY/AGENT INFORMATION:
51 (A) NAME: Lauro, Peter C.
52 (B) REGISTRATION NUMBER: 32,360
53 (C) REFERENCE/DOCKET NUMBER: UAI-004CPDV2CN
54

55 (xii) TELECOMMUNICATION INFORMATION:
56 (A) TELEPHONE: (617) 227-7400
57 (B) TELEFAX: (617) 742-4214
58
59

60 (2) INFORMATION FOR SEQ ID NO:1:

61
62 (i) SEQUENCE CHARACTERISTICS:
63 (A) LENGTH: 14 base pairs
64 (B) TYPE: nucleic acid
65 (C) STRANDEDNESS: single
66 (D) TOPOLOGY: linear
67

68 (ii) MOLECULE TYPE: cDNA
69
70
71

72 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
73

74 TATTAGTAGA TCTG

14

75
76 (2) INFORMATION FOR SEQ ID NO:2:

77
78 (i) SEQUENCE CHARACTERISTICS:
79 (A) LENGTH: 14 base pairs
80 (B) TYPE: nucleic acid
81 (C) STRANDEDNESS: single
82 (D) TOPOLOGY: linear
83

84 (ii) MOLECULE TYPE: cDNA
85
86
87

88 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
89

90 TACAGATGTA CTAA

14

91
92 (2) INFORMATION FOR SEQ ID NO:3:

93
94 (i) SEQUENCE CHARACTERISTICS:
95 (A) LENGTH: 845 base pairs
96 (B) TYPE: nucleic acid
97 (C) STRANDEDNESS: single
98 (D) TOPOLOGY: linear
99

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PATENT APPLICATION US/09/756,551A**

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100      (ii) MOLECULE TYPE: cDNA
101
102
103      (ix) FEATURE:
104          (A) NAME/KEY: CDS
105          (B) LOCATION: 20..845
106
107
108      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:
109
110      ACACAGCAAT CAGGTCAGC CAA AAT TAC CCT ATA GTG CAG AAC ATC CAG GGG  52
111          Gln Asn Tyr Pro Ile Val Gln Asn Ile Gln Gly
112              1           5           10
113
114      CAA ATG GTA CAT CAG GCC ATA TCA CCT AGA ACT TTA AAT GCA TGG GTA  100
115          Gln Met Val His Gln Ala Ile Ser Pro Arg Thr Leu Asn Ala Trp Val
116              15          20          25
117
118      AAA GTA GTA GAA GAG AAG GCT TTC AGC CCA GAA GTG ATA CCC ATG TTT  148
119          Lys Val Val Glu Glu Lys Ala Phe Ser Pro Glu Val Ile Pro Met Phe
120              30          35          40
121
122      TCA GCA TTA TCA GAA GGA GCC ACC CCA CAA GAT TTA AAC ACC ATG CTA  196
123          Ser Ala Leu Ser Glu Gly Ala Thr Pro Gln Asp Leu Asn Thr Met Leu
124              45          50          55
125
126      AAC ACA GTG GGG GGA CAT CAA GCA GCC ATG CAA ATG TTA AAA GAG ACC  244
127          Asn Thr Val Gly Gly His Gln Ala Ala Met Gln Met Leu Lys Glu Thr
128              60          65          70          75
129
130      ATC AAT GAG GAA GCT GCA GAA TGG GAT AGA GTG CAT CCA GTG CAT GCA  292
131          Ile Asn Glu Ala Ala Glu Trp Asp Arg Val His Pro Val His Ala
132              80          85          90
133
134      GGG CCT ATT GCA CCA GGC CAG ATG AGA GAA CCA AGG GGA AGT GAC ATA  340
135          Gly Pro Ile Ala Pro Gly Gln Met Arg Glu Pro Arg Gly Ser Asp Ile
136              95          100         105
137
138      GCA GGA ACT ACT AGT ACC CTT CAG GAA CAA ATA GGA TGG ATG ACA AAT  388
139          Ala Gly Thr Thr Ser Thr Leu Gln Glu Gln Ile Gly Trp Met Thr Asn
140              110         115         120
141
142      AAT CCA CCT ATC CCA GTA GGA GAA ATT TAT AAA AGA TGG ATA ATC CTG  436
143          Asn Pro Pro Ile Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile Leu
144              125         130         135
145
146      GGA TTA AAT AAA ATA GTA AGA ATG TAT AGC CCT ACC AGC ATT CTG GAC  484
147          Gly Leu Asn Lys Ile Val Arg Met Tyr Ser Pro Thr Ser Ile Leu Asp
148              140         145         150         155
149
150      ATA AGA CAA GGA CCA AAG GAA CCC TTT AGA GAC TAT GTA GAC CGG TTC  532
151          Ile Arg Gln Gly Pro Lys Glu Pro Phe Arg Asp Tyr Val Asp Arg Phe
152              160         165         170

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DATE: 10/26/2001
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153 TAT AAA ACT CTA AGA GCC GAG CAA GCT TCA CAG GAG GTA AAA AAT TGG 580
 154 Tyr Lys Thr Leu Arg Ala Glu Gln Ala Ser Gln Glu Val Lys Asn Trp
 155 175 180 185
 156
 157 ATG ACA GAA ACC TTG TTG GTC CAA AAT GCG AAC CCA GAT TGT AAG ACT 628
 158 Met Thr Glu Thr Leu Leu Val Gln Asn Ala Asn Pro Asp Cys Lys Thr
 159 190 195 200
 160
 161 ATT TTA AAA GCA TTG GGA CCA GCG GCT ACA CTA GAA GAA ATG ATG ACA 676
 162 Ile Leu Lys Ala Leu Gly Pro Ala Ala Thr Leu Glu Glu Met Met Thr
 163 205 210 215
 164
 165 GCA TGT CAG GGA GTA GGA GGA CCC GGC CAT AAG GCA AGA GTT TTG GCT 724
 166 Ala Cys Gln Gly Val Gly Pro Gly His Lys Ala Arg Val Leu Ala
 167 220 225 230 235
 168
 169 GAA GCA ATG AGC CAA GTA ACA AAT TCA GCT ACC ATA ATG ATG CAG AGA 772
 170 Glu Ala Met Ser Gln Val Thr Asn Ser Ala Thr Ile Met Met Gln Arg
 171 240 245 250
 172
 173 GGC AAT TTT AGG AAC CAA AGA AAG ATT GTT AAG TGT TTC AAT TGT GGC 820
 174 Gly Asn Phe Arg Asn Gln Arg Lys Ile Val Lys Cys Phe Asn Cys Gly
 175 255 260 265
 176
 177 AAA GAA GGG CAC ACA GCC AGA AAG T 845
 178 Lys Glu Gly His Thr Ala Arg Lys
 179 270 275
 180
 181
 182
 183 (2) INFORMATION FOR SEQ ID NO:4:
 184
 185 (i) SEQUENCE CHARACTERISTICS:
 186 (A) LENGTH: 275 amino acids
 187 (B) TYPE: amino acid
 188 (D) TOPOLOGY: linear
 189
 190 (ii) MOLECULE TYPE: protein
 191
 192 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:
 193
 194 Gln Asn Tyr Pro Ile Val Gln Asn Ile Gln Gly Gln Met Val His Gln 887
 195 1 5 10 15
 196
 197 Ala Ile Ser Pro Arg Thr Leu Asn Ala Trp Val Lys Val Val Glu Glu
 198 20 25 30
 199
 200 Lys Ala Phe Ser Pro Glu Val Ile Pro Met Phe Ser Ala Leu Ser Glu
 201 35 40 45
 202
 203 Gly Ala Thr Pro Gln Asp Leu Asn Thr Met Leu Asn Thr Val Gly Gly
 204 50 55 60
 205

**RAW SEQUENCE LISTING
PATENT APPLICATION US/09/756,551A**DATE: 10/26/2001
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206 His Gln Ala Ala Met Gln Met Leu Lys Glu Thr Ile Asn Glu Glu Ala
207 65 70 75 80
208
209 Ala Glu Trp Asp Arg Val His Pro Val His Ala Gly Pro Ile Ala Pro
210 85 90 95
211
212 Gly Gln Met Arg Glu Pro Arg Gly Ser Asp Ile Ala Gly Thr Thr Ser
213 100 105 110
214
215 Thr Leu Gln Glu Gln Ile Gly Trp Met Thr Asn Asn Pro Pro Ile Pro
216 115 120 125
217
218 Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile Leu Gly Leu Asn Lys Ile
219 130 135 140
220
221 Val Arg Met Tyr Ser Pro Thr Ser Ile Leu Asp Ile Arg Gln Gly Pro
222 145 150 155 160
223
224 Lys Glu Pro Phe Arg Asp Tyr Val Asp Arg Phe Tyr Lys Thr Leu Arg
225 165 170 175
226
227 Ala Glu Gln Ala Ser Gln Glu Val Lys Asn Trp Met Thr Glu Thr Leu
228 180 185 190
229
230 Leu Val Gln Asn Ala Asn Pro Asp Cys Lys Thr Ile Leu Lys Ala Leu
231 195 200 205
232
233 Gly Pro Ala Ala Thr Leu Glu Glu Met Met Thr Ala Cys Gln Gly Val
234 210 215 220
235
236 Gly Gly Pro Gly His Lys Ala Arg Val Leu Ala Glu Ala Met Ser Gln
237 225 230 235 240
238
239 Val Thr Asn Ser Ala Thr Ile Met Met Gln Arg Gly Asn Phe Arg Asn
240 245 250 255
241
242 Gln Arg Lys Ile Val Lys Cys Phe Asn Cys Gly Lys Glu Gly His Thr
243 260 265 270
244
245 Ala Arg Lys
246 275
247
248 (2) INFORMATION FOR SEQ ID NO:5:
249
250 (i) SEQUENCE CHARACTERISTICS:
251 (A) LENGTH: 948 base pairs
252 (B) TYPE: nucleic acid
253 (C) STRANDEDNESS: single
254 (D) TOPOLOGY: linear
255
256 (ii) MOLECULE TYPE: cDNA
257
258

PAGE: 1

**SEQUENCE VERIFICATION REPORT
PATENT APPLICATION US/09/756,551A**

DATE: 10/26/2001

TIME: 08:35:20

INPUT SET: S36649.raw

Line

Error

Original Text

**RAW SEQUENCE LISTING
PATENT APPLICATION US/09/756,551A**

DATE: 10/26/2001
TIME: 08:28:16

INPUT SET: S36649.raw

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PATENT APPLICATION US/09/756,551A**DATE: 10/26/2001
TIME: 08:28:16**INPUT SET: S36649.raw**

47 (A) APPLICATION NUMBER: 08/087,009
48 (B) FILING DATE: 01-JUL-1993
49
50 (xi) ATTORNEY/AGENT INFORMATION:
51 (A) NAME: Lauro, Peter C.
52 (B) REGISTRATION NUMBER: 32,360
53 (C) REFERENCE/DOCKET NUMBER: UAI-004CPDV2CN
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56 (A) TELEPHONE: (617) 227-7400
57 (B) TELEFAX: (617) 742-4214
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59

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62 (A) LENGTH: 14 base pairs
63 (B) TYPE: nucleic acid
64 (C) STRANDEDNESS: single
65 (D) TOPOLOGY: linear
66

67 (ii) MOLECULE TYPE: cDNA
68
69
70
71

72 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
73

74 TATTAGTAGA TCTG

14

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76 (i) SEQUENCE CHARACTERISTICS:
77 (A) LENGTH: 14 base pairs
78 (B) TYPE: nucleic acid
79 (C) STRANDEDNESS: single
80 (D) TOPOLOGY: linear
81

82 (ii) MOLECULE TYPE: cDNA
83
84
85
86
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88 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
89

90 TACAGATGTA CTAA

14

91 (2) INFORMATION FOR SEQ ID NO:3:

92 (i) SEQUENCE CHARACTERISTICS:
93 (A) LENGTH: 845 base pairs
94 (B) TYPE: nucleic acid
95 (C) STRANDEDNESS: single
96 (D) TOPOLOGY: linear
97

98
99

**RAW SEQUENCE LISTING
PATENT APPLICATION US/09/756,551A**

DATE: 10/26/2001
TIME: 08:28:17

INPUT SET: S36649.raw

100 (ii) MOLECULE TYPE: cDNA
 101
 102
 103 (ix) FEATURE:
 104 (A) NAME/KEY: CDS
 105 (B) LOCATION: 20..845
 106
 107
 108 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:
 109
 110 ACACAGCAAT CAGGTCAGC CAA AAT TAC CCT ATA GTG CAG AAC ATC CAG GGG 52
 111 Gln Asn Tyr Pro Ile Val Gln Asn Ile Gln Gly
 112 1 5 10
 113
 114 CAA ATG GTA CAT CAG GCC ATA TCA CCT AGA ACT TTA AAT GCA TGG GTA 100
 115 Gln Met Val His Gln Ala Ile Ser Pro Arg Thr Leu Asn Ala Trp Val
 116 15 20 25
 117
 118 AAA GTA GTA GAA GAG AAG GCT TTC AGC CCA GAA GTG ATA CCC ATG TTT 148
 119 Lys Val Val Glu Glu Lys Ala Phe Ser Pro Glu Val Ile Pro Met Phe
 120 30 35 40
 121
 122 TCA GCA TTA TCA GAA GGA GCC ACC CCA CAA GAT TTA AAC ACC ATG CTA 196
 123 Ser Ala Leu Ser Glu Gly Ala Thr Pro Gln Asp Leu Asn Thr Met Leu
 124 45 50 55
 125
 126 AAC ACA GTG GGG GGA CAT CAA GCA GCC ATG CAA ATG TTA AAA GAG ACC 244
 127 Asn Thr Val Gly Gly His Gln Ala Ala Met Gln Met Leu Lys Glu Thr
 128 60 65 70 75
 129
 130 ATC AAT GAG GAA GCT GCA GAA TGG GAT AGA GTG CAT CCA GTG CAT GCA 292
 131 Ile Asn Glu Ala Ala Glu Trp Asp Arg Val His Pro Val His Ala
 132 80 85 90
 133
 134 GGG CCT ATT GCA CCA GGC CAG ATG AGA GAA CCA AGG GGA AGT GAC ATA 340
 135 Gly Pro Ile Ala Pro Gly Gln Met Arg Glu Pro Arg Gly Ser Asp Ile
 136 95 100 105
 137
 138 GCA GGA ACT ACT AGT ACC CTT CAG GAA CAA ATA GGA TGG ATG ACA AAT 388
 139 Ala Gly Thr Thr Ser Thr Leu Gln Glu Gln Ile Gly Trp Met Thr Asn
 140 110 115 120
 141
 142 AAT CCA CCT ATC CCA GTA GGA GAA ATT TAT AAA AGA TGG ATA ATC CTG 436
 143 Asn Pro Pro Ile Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile Leu
 144 125 130 135
 145
 146 GGA TTA AAT AAA ATA GTA AGA ATG TAT AGC CCT ACC AGC ATT CTG GAC 484
 147 Gly Leu Asn Lys Ile Val Arg Met Tyr Ser Pro Thr Ser Ile Leu Asp
 148 140 145 150 155
 149
 150 ATA AGA CAA GGA CCA AAG GAA CCC TTT AGA GAC TAT GTA GAC CGG TTC 532
 151 Ile Arg Gln Gly Pro Lys Glu Pro Phe Arg Asp Tyr Val Asp Arg Phe
 152 160 165 170

**RAW SEQUENCE LISTING
PATENT APPLICATION US/09/756,551A**

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TIME: 08:28:17

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153	TAT AAA ACT CTA AGA GCC GAG CAA GCT TCA CAG GAG GTA AAA AAT TGG	580
154	Tyr Lys Thr Leu Arg Ala Glu Gln Ala Ser Gln Glu Val Lys Asn Trp	
155	175 180 185	
156		
157		
158	ATG ACA GAA ACC TTG TTG GTC CAA AAT GCG AAC CCA GAT TGT AAG ACT	628
159	Met Thr Glu Thr Leu Leu Val Gln Asn Ala Asn Pro Asp Cys Lys Thr	
160	190 195 200	
161		
162	ATT TTA AAA GCA TTG GGA CCA GCG GCT ACA CTA GAA GAA ATG ATG ACA	676
163	Ile Leu Lys Ala Leu Gly Pro Ala Ala Thr Leu Glu Glu Met Met Thr	
164	205 210 215	
165		
166	GCA TGT CAG GGA GTA GGA GGA CCC GGC CAT AAG GCA AGA GTT TTG GCT	724
167	Ala Cys Gln Gly Val Gly Gly Pro Gly His Lys Ala Arg Val Leu Ala	
168	220 225 230 235	
169		
170	GAA GCA ATG AGC CAA GTA ACA AAT TCA GCT ACC ATA ATG ATG CAG AGA	772
171	Glu Ala Met Ser Gln Val Thr Asn Ser Ala Thr Ile Met Met Gln Arg	
172	240 245 250	
173		
174	GGC AAT TTT AGG AAC CAA AGA AAG ATT GTT AAG TGT TTC AAT TGT GGC	820
175	Gly Asn Phe Arg Asn Gln Arg Lys Ile Val Lys Cys Phe Asn Cys Gly	
176	255 260 265	
177		
178	AAA GAA GGG CAC ACA GCC AGA AAG T	845
179	Lys Glu Gly His Thr Ala Arg Lys	
180	270 275	
181		
182		
183	(2) INFORMATION FOR SEQ ID NO:4:	
184		
185	(i) SEQUENCE CHARACTERISTICS:	
186	(A) LENGTH: 275 amino acids	
187	(B) TYPE: amino acid	
188	(D) TOPOLOGY: linear	
189		
190	(ii) MOLECULE TYPE: protein	
191		
192	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:	
193		
194	Gln Asn Tyr Pro Ile Val Gln Asn Ile Gln Gly Gln Met Val His Gln	
195	1 5 10 15	
196		
197	Ala Ile Ser Pro Arg Thr Leu Asn Ala Trp Val Lys Val Val Glu Glu	
198	20 25 30	
199		
200	Lys Ala Phe Ser Pro Glu Val Ile Pro Met Phe Ser Ala Leu Ser Glu	
201	35 40 45	
202		
203	Gly Ala Thr Pro Gln Asp Leu Asn Thr Met Leu Asn Thr Val Gly Gly	
204	50 55 60	
205		

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/756,551ADATE: 10/26/2001
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206 His Gln Ala Ala Met Gln Met Leu Lys Glu Thr Ile Asn Glu Glu Ala
207 65 70 75 80
208
209 Ala Glu Trp Asp Arg Val His Pro Val His Ala Gly Pro Ile Ala Pro
210 85 90 95
211
212 Gly Gln Met Arg Glu Pro Arg Gly Ser Asp Ile Ala Gly Thr Thr Ser
213 100 105 110
214
215 Thr Leu Gln Glu Gln Ile Gly Trp Met Thr Asn Asn Pro Pro Ile Pro
216 115 120 125
217
218 Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile Leu Gly Leu Asn Lys Ile
219 130 135 140
220
221 Val Arg Met Tyr Ser Pro Thr Ser Ile Leu Asp Ile Arg Gln Gly Pro
222 145 150 155 160
223
224 Lys Glu Pro Phe Arg Asp Tyr Val Asp Arg Phe Tyr Lys Thr Leu Arg
225 165 170 175
226
227 Ala Glu Gln Ala Ser Gln Glu Val Lys Asn Trp Met Thr Glu Thr Leu
228 180 185 190
229
230 Leu Val Gln Asn Ala Asn Pro Asp Cys Lys Thr Ile Leu Lys Ala Leu
231 195 200 205
232
233 Gly Pro Ala Ala Thr Leu Glu Glu Met Met Thr Ala Cys Gln Gly Val
234 210 215 220
235
236 Gly Gly Pro Gly His Lys Ala Arg Val Leu Ala Glu Ala Met Ser Gln
237 225 230 235 240
238
239 Val Thr Asn Ser Ala Thr Ile Met Met Gln Arg Gly Asn Phe Arg Asn
240 245 250 255
241
242 Gln Arg Lys Ile Val Lys Cys Phe Asn Cys Gly Lys Glu Gly His Thr
243 260 265 270
244
245 Ala Arg Lys
246 275
247
248 (2) INFORMATION FOR SEQ ID NO:5:
249
250 (i) SEQUENCE CHARACTERISTICS:
251 (A) LENGTH: 948 base pairs
252 (B) TYPE: nucleic acid
253 (C) STRANDEDNESS: single
254 (D) TOPOLOGY: linear
255
256 (ii) MOLECULE TYPE: cDNA
257
258

PAGE: 1

**SEQUENCE VERIFICATION REPORT
PATENT APPLICATION US/09/756,551A**

DATE: 10/26/2001

TIME: 08:28:18

INPUT SET: S36649.raw

Line	Error	Original Text
28	Wrong application Serial Number	(A) APPLICATION NUMBER: 08/756,551